

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-19 are currently pending in this application. Claims 1 and 11 are independent. The remaining claims depend, directly or indirectly, from claims 1 and 11.

Drawings

The drawings are objected to by the Examiner for lack of labels of all the elements shown in Figure 1. In accordance with the Examiner's suggestions, Figure 1 has been amended by this reply to include the labels of all the elements. No new matter has been added by way of these amendments. Accordingly, withdrawal of this objection and acceptance of the drawings in this application is respectfully requested.

Objections

Claims 2, 4, and 16 are objected to for minor informalities. Claim 2 has been amended to change "the data buffer" to "the data buffer area" in accordance with the Examiner's suggestions. Additionally, claim 4 has been amended to change "data buffer two sub-area" to "the two data buffer sub-areas." With respect to claim 16, the limitation "from a selected one of the graphics buffer sub-area" is changed to "from a selected one of the graphics buffer sub-area." Although the Examiner suggests removing the word "buffer" from this limitation on page 5 of the Office Action mailed May 20, 2005, the Applicant feels that "graphics buffer" is the correct phrase for this limitation, as throughout the specification, this is referred to as "graphics buffer sub-area.". Accordingly, withdrawal of these objections are respectfully requested.

Rejections under 35 U.S.C. § 112

Claims 1-19 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. This rejection is respectfully traversed.

In the Office Action, the Examiner specifically states that it is unclear how a memory/buffer is able to perform a function of mixing/combining data. While it is true that data is mixed by the mixing circuits (*i.e.*, 50, 51) and the combining circuit (*i.e.*, 53), this does not prevent data from being combined elsewhere, *i.e.*, in the buffers of the claimed invention. For example, consider the following disclosure of the specification (*See* Specification, page 18, lines 5-19):

“The combination of the two images, the subtitles images in one or other of the buffer sub-areas 45A and 45A’ (*i.e.*, data buffer area, as claimed) and the icon image in the icon buffer area 45A’ (*i.e.*, graphics buffer area, as claimed) is achieved by copying the icon image into the working buffer, that is, into which ever of the two sub-areas 45A and 45A’ is not currently the display buffer. As specified by the controlling application, the subtitle device 4062 outputs an appropriate command to the graphic processor 36 to copy the contents of a specified icon buffer sub-area to the working buffer just before the working buffer is to become the display buffer, that is, when a complete subtitle page has been stored in the working buffer.

With the above arrangement, the icon image currently being displayed is stored in the display buffer, the next icon image to be displayed may already be stored in the working buffer, and a fresh icon image may be under construction by the icon generator while the working buffer is receiving subtitles data. This arrangement requires

synchronism between the interchanging of the working and adjacent play buffers and the construction of fresh icon images.”

From the above disclosure, it is clear to one skilled in the art how the data is combined in the buffer: the data is written at different addresses, which combines the data, without any active part taken by the buffer. Accordingly withdrawal of this rejection is respectfully requested.

In addition, the Examiner rejects claims 3 and 14 for insufficient antecedent basis. Claims 3 and 14 have been amended to correct the antecedent basis issues. Specifically, claims 3 and 14 now recite a first and a second data buffer sub-area. Further, the Examiner states that it is unclear the difference or similarity between the other data buffer sub-area that stores incoming display data, and the other data buffer sub-area that receives the passable graphics data. Applicant believes that the amendments made to claims 3 and 14 clarify this issue as well, as two “other data buffer sub-areas” are no longer recited in the amended claims. Particularly, the first and second data buffer sub-areas are interchanged to store different data, but both are associated with the two data buffer sub-areas recited in independent claim 1.

Rejections under 35 U.S.C. § 102

Claims 1-7 and 11-19 stand rejected under 35 U.S.C. 102(b) as being unpatentable over EP0752695 (“O’Sullivan”). This rejection is respectfully traversed.

As described above, the claimed invention combines data in buffer areas by writing the data to different addresses and then copying the data into a working buffer that is not the display buffer. Then, the data is copied into the display buffer just before it becomes the display buffer, and is displayed in this manner.

In contrast to the claimed invention, O'Sullivan discloses a method for simultaneously displaying graphics and video data on a display. Specifically, O'Sullivan discloses a graphics adapter chip that stores graphics data in a graphics memory, while a video source stores video data in a video memory. Further, in O'Sullivan, source selection logic is used to select when each of the graphics memory and the video memory output blocks of data to a digital-to-analog converter (DAC) for display on the screen (see, e.g., Figure 1 of O'Sullivan).

With respect to the rejection of the claims, O'Sullivan fails to disclose or suggest the combination of incoming data and graphics data *in a data buffer area*, as recited in independent claim 1 of the present invention. Rather, O'Sullivan discloses combining data in the DAC, where the combination of the data occurs "on the fly," immediately before the data is to be displayed on a display screen, which is clearly not the same as combining data in the data buffer area *in advance* of the data being displayed. In fact, a DAC is cannot be considered a buffer. In other words, because the data is combined and stored in a data buffer area in the present invention, the data is not immediately displayed, but can be displayed at some later time, whereas data combined in a DAC is displayed on the screen as soon as the DAC produces the output of the combined data.

Further, Figure 2 of O'Sullivan reveals that O'Sullivan's graphics buffer area forwards its data to the DAC (50) as does the data buffer area (46). Thus, there is no link between the two buffer areas of O'Sullivan.

In view of the above, O'Sullivan fails to disclose each and every element of the claimed invention. Thus, independent claim 1 is patentable over O'Sullivan. Dependent claims 2-7 are patentable for at least the same reasons. Further, independent claim 11 contains similar allowable subject matter, and is patentable over O'Sullivan for the same reasons as independent

claim 1. Associated dependent claims 12-19 are patentable for at least the same reasons.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 8-10 stand rejected under 35 U.S.C. 103(a) as unpatentable over O'Sullivan in view of U.S. Patent No. 5,835,156 ("Blonstein"). This rejection is respectfully traversed.

As described above, O'Sullivan fails to disclose or suggest the limitations of independent claim 1 of the present invention, and Blonstein fails to disclose or suggest that which O'Sullivan lacks. Specifically, Blonstein relates to a satellite television receiver using a remote pointing device to provide random user access to a graphical user interface (GUI) displayed on a TV screen. Cursor movement is displayed by multiple erasures and redraws of the cursor. However, Blonstein fails to disclose or suggest that incoming data is combined with graphics data in a data buffer area, where the data is combined and stored in the data buffer area for display at some later time. In fact, Blonstein only handles a cursor (which, according to the description of the present invention, is handled by another layer than that responsible for the graphics, see, e.g., Figure 6 and the accompanying text). As claims 8-10 depend from independent claim 1, claims 8-10 are patentable for the reasons described above.

Thus, O'Sullivan and Blonstein, whether considered separately or in combination, fail to render claims 8-10 obvious. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number

listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591
(Reference Number 11345/027001).

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Attachments

AMENDMENTS TO THE DRAWINGS

Please amend the figures as shown in the enclosed replacement sheet. The attached sheet of drawings includes changes to Figure 1. Specifically, Figure 1 has been amended to include all the labels corresponding to each element shown in Figure 1. Applicant submits that these replacement figures are formal. No new subject matter is added by way of these amendments.